

Pain assessment with cognitively impaired older people in the acute hospital setting

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KEY WORDS

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SUMMARY POINTS

- Research reveals that older people continue to experience much suffering from acute and chronic pain conditions.
- People with cognitive impairment receive less analgesia than their cognitively intact peers.
- Postoperative pain assessment with older people in the acute hospital setting remains a challenge.
- Context and culture have a significant impact of pain assessment practices.
- Due to a paucity of research exploring how pain assessment and management practices with cognitively impaired older people may be realised in the acute hospital setting, there is a need for further research to be conducted.

Introduction

Postoperative pain assessment and management continues to challenge healthcare professionals. As the number of older people (65yrs or above) requiring care within the NHS continues to rise, over recent years there has been an increasing number of studies exploring the recognition and measurement of pain in this patient group. Numerous papers outline a variety of pain assessment tools that aim to assist healthcare professionals with identifying the nature and individual characteristics of pain. Furthermore, in accordance with the Joint Commission on the Accreditation of Healthcare Organisations (1) and The Royal College of Anaesthetists and The British Pain Society (2), incorporating pain assessment into the core elements of patient observations has been heralded as being fundamental to identifying appropriate pain relief strategies. Nevertheless, it would appear that applying and sustaining the principles of pain assessment into practice remains problematic.

The unique needs of older people

The high prevalence of pain in older people is associated with chronic underlying health disorders (e.g. arthritis, peripheral vascular disease) and acute pain conditions such as cancer and surgical procedures. Older people offer distinct challenges within the acute surgical environment as pain not only causes much suffering but also lowers the individual's quality of life (3), and predisposes them to a number of medical conditions, including depression, sleep disturbances, anxiety and occasionally aggressive behaviour (4,5). For those people with cognitive impairment, admission to the acute hospital setting can cause immense stress, resulting in an increase in disorientation and the emergence of behaviours that challenge ward staff.

Despite an increased awareness of the need to assess and treat pain effectively, it would appear that healthcare professionals remain reluctant to prescribe analgesia for older patients in general, and for patients with cognitive impairment in particular (6,7). Horgas and Tsai (8) reported that the more confused and disorientated a patient becomes the less likely they are to be prescribed and administered

analgesia. Paradoxically, Duggleby and Lander (9) argue that a major predictor of mental status decline is pain and not analgesic intake, as is so often inferred. In such circumstances, behaviours associated with cognitive impairment and/or untreated pain (e.g. verbal and physical aggression, agitation) can increase patients' distress and become a significant burden for staff providing care in acute hospital settings (10). Thus older patients exhibiting challenging behaviours are frequently administered antipsychotic medication (11) rather than receiving the appropriate postoperative analgesia that could reduce patient confusion within the ward setting (12). There is a need to challenge fears and misconceptions that surround the effects of pain and pain management in relation to older patients and to develop supportive, ongoing nursing interventions that can alleviate pain, benefit clinical outcomes, reduce the patient's hospital stay and ultimately lower costs (13).

As nurses are pivotal to pain assessment and management decision-making processes, it is imperative for nurses working in the acute hospital setting to understand the effect that cognitive impairment has on patients and how this fits with pain and its management. However, nursing staff caring for acutely ill older patients, with varying degrees of cognitive impairment, often require additional assistance to gain the necessary specialised skills, knowledge and expertise to enhance pain assessment practices. To compound the

Table 1 Six areas required to be incorporated into behavioural pain assessment charts

- Facial expression
- Negative vocalisation
- Body language
- Changes in activity patterns or routine
- Changes in interpersonal interactions
- Mental status changes

American Geriatrics Society (4)

issues, acute hospital settings do not always have a care environment conducive to meeting the needs of older patients with cognitive impairment (14). High workloads and noisy ward environments may result in older people not being able to conform to standard pain assessment practices, potentially making the situation stressful and difficult for patients.

Pain assessment practices

It is well documented that pain assessment is an important first step to any pain management process. Despite the literature advocating that the patient's description of their pain is the most reliable and accurate indicator, pain assessment continues to pose difficulties for the healthcare team. Arguably this is because pain assessment is not based exclusively upon subjective criteria (what the patient says). Coincidentally a report of pain entails an objective measurement (how the patient looks and acts) in which healthcare professionals try to develop some understanding of the intensity, quality, location, duration, pattern and emotional impact of the pain being described and treat it appropriately. However, this approach to pain assessment can be problematic as social attitudes and cultural beliefs, of both the person in pain and healthcare professionals prevail and may potentially act as a barrier to adequate pain management practices.

While the evidence suggests that cognitive impairment inhibits older peoples' ability or inclination to report pain, McClean (15) proposes that older people with mild to moderate cognitive impairment have the ability to report pain as accurately as their younger counterparts, using unilateral pain rating scales. Nevertheless, he suggests that in order to elicit a forthright response it may be necessary to explore using different words other than pain (e.g. ache, discomfort). For those patients with mild cognitive impairment it is also helpful to clearly ask if they have pain at present, how big a problem it is and to give them sufficient time to answer (16,17).

When caring for patients with severe cognitive impairment/dementia it is necessary to consider a broader approach to pain assessment. As the ability to recall and/or verbalise a self-report of pain diminishes, behavioural pain scales may offer a mechanism to assess and measure pain effectively. There are a number of behavioural indicator pain assessment scales available (18-23). However, the evidence for using these scales in the acute postoperative setting remains contradictory (20,24,25). While debate concerning the reliability and validity of observational pain scales remains ongoing, the American Geriatrics Society (4) have outlined six areas that they consider should be

Abbey Pain Scale
For measurement of pain in people with dementia who cannot verbalise.

How to use scale: While observing the resident, score questions 1 to 6

Name of resident:

Name and designation of person completing the scale:

Date: **Time:**

Latest pain relief given was: **at** **hrs.**

Q1.	Vocalisation eg: whimpering, groaning, crying Absent 0 Mild 1 Moderate 2 Severe 3	Q1	<input type="text"/>
Q2.	Facial expression eg: looking tense, frowning, grimacing, looking frightened Absent 0 Mild 1 Moderate 2 Severe 3	Q2	<input type="text"/>
Q3.	Change in body language eg: fidgeting, rocking, guarding part of body, withdrawn Absent 0 Mild 1 Moderate 2 Severe 3	Q3	<input type="text"/>
Q4.	Behavioural Change eg: increased confusion, refusing to eat, alteration in usual patterns Absent 0 Mild 1 Moderate 2 Severe 3	Q4	<input type="text"/>
Q5.	Physiological change eg: temperature, pulse or blood pressure outside normal limits, perspiring, flushing or pallor Absent 0 Mild 1 Moderate 2 Severe 3	Q5	<input type="text"/>
Q6.	Physical changes eg: skin tears, pressure areas, arthritis, contractures, previous injuries. Absent 0 Mild 1 Moderate 2 Severe 3	Q6	<input type="text"/>

Add scores for 1 – 6 and record here **Total Pain Score**

Now tick the box that matches the Total Pain Score

0 – 2 No pain	3 – 7 Mild	8 – 13 Moderate	14+ Severe
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Finally, tick the box which matches the type of pain

Chronic	Acute	Acute on Chronic
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Dementia Care Australia Pty Ltd
Website: www.dementiacareaustralia.com

Abbey, J; De Bellis, A; Pillar, N; Esterman, A; Giles, L; Parker, D and Lowcay, B.
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Figure 1 Abbey Pain Scale

Table 2 Key affective and physical signs of discomfort in cognitively impaired older people

The four most commonly displayed behaviours of pain and distress exhibited by patients in study by Kovach et al (19):

- Tense muscles
- Sad facial expression
- Fidgeting
- Increased &/or sudden &/or repetitive verbalisation

In acute settings identification of the behavioural changes listed below, may need to be discussed with family or carers to ascertain if pain, emotional or environmental stressors may be causing the behaviour. These behavioural changes include:

- Increased agitation
- Body bracing
- Decreased cognition &/or functional ability
- Withdrawal
- Altered sleep pattern
- Increased pulse, B/P, or sweating

incorporated into behavioural pain assessment charts (Table 1). Currently the only two behavioural pain assessment scales that take account of all six areas identified by the AGS are The Assessment of Discomfort in Dementia Protocol (19), and The Abbey Pain Scale (22). Observational behavioural pain assessment measures therefore require to be more widely researched.

The Abbey Pain Scale (22) has been developed to measure pain in patients with late stage dementia (Figure 1). There are six categories, each levelled on a four point scale (Absent: 0; Mild: 1; Moderate: 2; Severe: 3), with a total score ranging from 0 to 18. The total score is interpreted as the 'probability' (17) that the person is experiencing pain (No pain: 0-2; Mild: 3-7; Moderate: 8-13; Severe: 14+). Immediately after movement the patient's pain is assessed against the scale. If necessary the patient's pain is treated, using either analgesia or non-pharmacological approaches, and then reassessed to record efficacy of any interventions. As with all pain assessment tools the Abbey Pain Scale has limitations. In particular it does not distinguish between distress and pain and it is reliant upon the nursing staff's interpretation of what the patient is experiencing. Furthermore, this tool was developed for patients in residential settings and would require additional research to ascertain if it is a reliable and valid measure of pain in acute care environments. However, one of its chief benefits is that it takes less than one minute to complete, making it an appealing tool to use in the acute hospital environment.

Due to its potential limitations it has been suggested that The Abbey Pain Scale should be used in conjunction with the Assessment of Discomfort in Dementia (ADD) protocol (26). Kovach et al (19) propose that much of the discomfort experienced by patients with late stage dementia is as a consequence of non-physiological sources (e.g. negotiating daily activities). Therefore both physical and affective (emotional) dimensions of discomfort need to be considered in order to comprehensively treat patient suffering (Table 2). The ADD protocol focuses on physical assessment, a review of the patient's history, an assessment of affective needs and the administration of analgesics (26).

While the ADD protocol, which was developed for use in residential care settings, may potentially be too labour intensive to use in the acute surgical environment, a focus on the affective needs of

cognitively impaired patients may be worthy of consideration. This step asks healthcare professionals to identify potential environmental stressors and sensory stimulation factors that may impact upon the patient and to consider if meaningful human interaction and/or non-pharmacological interventions may reduce the patient's distress/pain. This is important as successful assessment and control of pain in older people is not solely dependent upon on the administration of analgesia. There is also a requirement to develop the nurse/patient relationship and to communicate effectively (17) with patients and/or families/carers to gain some understanding of measures that might alleviate the older person's distress.

In an attempt to improve pain assessment practices in the acute hospital setting, Brown and O'Neill (27) introduced the Abbey Pain Scale, in conjunction with the ADD into two wards in a fracture/orthopaedic unit in a large NHS teaching hospital. Preliminary findings revealed that introducing a pain assessment tool, specifically for older people with cognitive impairment, heightened nurses' awareness of pain and its impact upon older people. In addition, adopting a structured approach to pain assessment enhanced communication between the patient, the nursing team and family members. Applying the Abbey Pain Scale enabled pain assessment practices with dementia/cognitively impaired older people to be more individualised, improved challenging behaviours, reduced the need to administer sedative type drugs, assisted nurses in their decision to administer analgesia appropriate to patient needs, and reduced patient resistance to movement and mobilisation.

In a further development, the Doloplus collective team have recently introduced a five-item Algoplus® behaviour-assessment scale, devised specifically to detect acute pain in patients who have an inability to communicate verbally (23). This scale was developed using a multi-centred cross-sectional approach and was utilised in several different care settings and hospitals. The authors argue that this scale is quick and easy to apply in acute care settings. Furthermore, Algoplus® demonstrated good psychometric properties in a wide range of clinical settings, excellent inter-rater reliability, and a high sensitivity to a change in pain. While early indications suggest that Algoplus® would be a valuable tool for older patients who are unable to communicate verbally in acute care settings, a number of limitations have been identified. Similarly to the Abbey Pain Scale,

Algoplus® requires further testing in the acute care environment to determine if it is able to distinguish between distress and pain in cognitively impaired older people. There is also a requirement to conduct further research to establish if specific training for healthcare staff is necessary (28).

The importance of context

Deciding to change pain assessment practices with older people by applying a particular measurement scale and implementing an education programme is insufficient per se to change the practice context in a positive and sustainable way. Researchers exploring evidence-based practice agree that context (i.e. the environment or setting in which practice occurs) has a significant impact upon ward-based practices (29). Practice is contextually located and embedded in multiple cultures that are created by individuals within that culture (30). Each ward or unit will possess its own unique culture ['how things are done around here' (31)] based upon shared learning experiences and taken for granted basic assumptions. In terms of pain assessment and management, Lauzon Clabo (32) argues that pain assessment practices are profoundly shaped by the social context in which healthcare professionals practice. Attitudes that support positive pain management approaches and teams who embark upon regular discussions regarding pain can create 'a type of group-think' about pain management issues (33). However, as social norms prevail, negative attitudes towards pain assessment and management may equally have an inhibitory effect on pain management issues.

Improving pain management with cognitively impaired older people requires healthcare professionals to reflect on reactions, values and beliefs surrounding pain and how these have the potential to influence the care provided. Arguably the Acute Pain Team (APT) can offer some direction and leadership in this area. MacKintosh and Bowles (34) propose that the clinical nurse specialist (CNS) within the APT promotes good practice, has increased awareness of what good pain management entails and influences healthcare professionals' decision-making. Indeed, Thompson et al (35) argue that nurses value the advice or guidance of a CNS. Therefore the challenge for the CNS/APT is to adopt multiple approaches to changing pain assessment practices with cognitively impaired older people, in an attempt to effect a sustainable change upon the culture and context of individual wards.

Conclusion

Older people with cognitive impairment are increasingly requiring care in the acute hospital setting. They offer unique challenges to the healthcare team and can be especially vulnerable to inadequate pain assessment and management practices when they enter acute care. Despite there being a number of pain assessment tools available that have been specifically designed to address the needs of older people with cognitive impairment, there is a paucity of evidence as to which tool may be most helpful in the acute hospital setting. However, it is generally agreed that once it has become impossible for a patient

to verbalise their pain, pain scales utilised for older people with cognitive impairment should incorporate observational behavioural components. Regardless of the pain scale applied it is important that it encourages communication and increased understanding between the patient, family and the various professionals treating the person in pain.

The pervasive ward context and culture has an effect on individuals and teams and impacts upon pain assessment and management practices with older people. To create and promote a culture in which nurses recognise the need for improving their pain assessment practices, seek the knowledge and skills to do so, and feel supported and encouraged, leadership from members of the APT may be vital.

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